

PATENT

## CERTIFICATE OF MAILING

I hereby certify that this correspondence and all identified attachments are being filed by hand January 23, 2004 with the:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

By:

James A. Henricks, 31,168

*All petition ABN 19/04*  
**RECEIVED**  
**JAN 23 2004**  
Technology Center 2600

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Patent	<b>Graham Alexander Munro MURDOCH,</b>	Examiner:	D. Pope
Application Of:	<b>Stuart Colin LITTLECHILD</b>		
Serial Number:	09/582,341		
Filed:	August 22, 2000	Group Art Unit:	2632
Title:	<b>TRANSMITTER AND A METHOD FOR TRANSMITTING DATA</b>		

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

## SECOND REQUEST FOR RECONSIDERATION OF HOLDING OF ABANDONMENT

Sir:

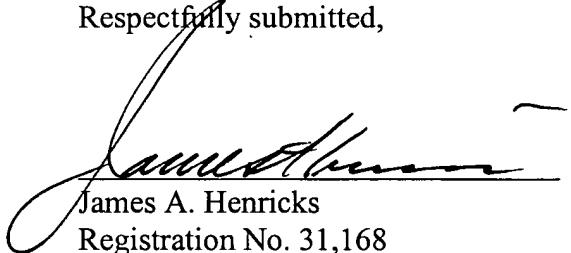
Applicant hereby requests reconsideration of the finding of abandonment for failure to respond to the Office Action dated January 18, 2001. Applicant's response entitled Response to Office Action Dated January 18, 2001, was filed July 24, 2001, along with a Petition for a three month extension of time. A copy of the response and extension of time are attached hereto as Exhibit 1, along with a copy of the stamped return post card showing the filing on that date.

Applicant filed with the Examiner by fax a first REQUEST FOR RECONSIDERATION OF HOLDING OF ABANDONMENT on September 29, 2003. A copy of the facsimile confirmation sheet is Attached as Exhibit 2.

Reconsideration of the Finding of abandonment and reconsideration of the January 18, 2001 rejection in view of Applicant's response is respectfully requested.

Please charge any additional fee that may be due or credit any overpayment to our deposit Account No. 50-0655. A duplicate copy of this Request is enclosed.

Respectfully submitted,



James A. Henricks  
Registration No. 31,168

Dated: January 21, 2004

**HENRICKS, SLAVIN & HOLMES LLP**  
840 Apollo Street, Suite 200  
El Segundo, CA 90245-4737  
310-563-1456  
310-563-1460 (fax)  
[jhenricks@hsh-iplaw.com](mailto:jhenricks@hsh-iplaw.com) (Email)

CERTIFICATE OF MAILING

I hereby certify that this correspondence and all identified attachments are being deposited on July 18, 2001 with the United States Postal Service as first class mail in an envelope with sufficient postage addressed to:

Commissioner of Patents  
Washington, D.C. 20231

By:

James A. Henricks, 31,168

Applicant: MURDOCH ET AL.

Serial No.: 09/582,341

Filed: December 24, 1998

Title: A TRANSMITTER AND A  
METHOD FOR TRANSMITTING DATA

Examiner: Pope, D.

Group Art Unit: 2632

*Duplicate*  
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Commissioner of Patents  
Washington, D.C. 20231

**RESPONSE TO OFFICE ACTION**  
**DATED JANUARY 18, 2001**

*original located in file*

Sir:

In response to the Office Action dated January 18, 2001, identified as paper No. 5, and having a shortened statutory response period ending April 18, 2001, please consider the following amendments and remarks.

**In the Claims**

Please amend the claims as follows:

47. (Amended) A system according to claim 46 for identifying luggage.
66. (Amended) A system according to claim 65 configured for identifying luggage.

## REMARKS

This application is a Section 371 of PCT/AU98/01077. New claims 35-68 are pending in the application and stand rejected. Original claims 1-34 have been canceled. Applicant notes with appreciation the Notice of References Cited, PT0-892, but there is no indication of any consideration of Applicants' Information Disclosure Statement filed concurrently with the section 371 documents. A copy of the Information Disclosure Statement and its enclosures is submitted herewith for consideration.

Claims 35-68 are all rejected under 35 U.S.C. 102 (e) as being allegedly anticipated by *Kumar*, U.S. Patent No. 6,005,894. In the rejection, the Examiner states that in *Kumar*, "the claimed providing a carrier signal, imposing a phase modulation of less than 90 degrees to create side bands of substantially lower amplitude, and providing a modulated signal to an antenna is met (see: column 19, lines 36 *et seq.*; col. 20, lines 1 *et seq.*, sometimes noted as [19:36])." Applicants respectfully traverse the rejection and request reconsideration of the claims in view of the following remarks.

Consider first Applicants' disclosure. According to one aspect of one of the present inventions, methods and apparatus are provided for transmitting data from a first antenna wherein the data is modulated, for example in a modulating circuit such as that shown in FIG. 7. In one preferred method, a carrier signal is provided and a phase modulation of less than 90 degrees is imposed on the carrier signal in accordance with a data signal to create a modulated signal. The modulated signal has a carrier frequency and side bands, and the side bands are substantially lower in amplitude than the carrier frequency. The modulated signal is then sent to a first antenna for transmission. Apparatus is also provided for phase modulation of a carrier signal, for example phase modulating the carrier signal by less than 90 degrees.

In accordance with a further aspect of one of the present inventions, the modulated signal is received with a second antenna, and a first signal is thereby produced and provided to a receiver for deriving a second signal representing the data signal. In one preferred form, the first signal is used to power the receiver, so that the receiver is a passive receiver. This allows the power transmission to be very efficient without any reduction in power transmission due to

modulation. It also allows transmission of data at very high speeds while maintaining low level sidebands, for example for conforming to emissions regulations.

In another form of one of the present inventions, methods and apparatus are described for providing a carrier signal and imposing a phase modulation on the carrier signal in accordance with a data signal to create a modulated signal having a carrier and side bands. The amount of phase modulation is selected such that the amplitude of the side bands is substantially lower than that of the carrier.

Consider now the reference relied upon by the Examiner. *Kumar* shows an AM-compatible digital broadcasting method and system, such as for the terrestrial radio frequency broadcast and reception of a digitally encoded signal together with an analog signal in the conventional AM-band of broadcast frequencies. *Kumar* provides descriptions of a number of prior art methods, and provides descriptions of a number of embodiments for purportedly carrying out the intended method. As noted above, the Examiner refers to text at column 19, lines 36 *et seq.*, and column 20, lines 1, *et seq.* However, the Examiner does not refer to any language that discusses, for example, phase modulation of less than 90 degrees on a carrier signal with a data signal to create a modulated signal having a carrier frequency and side bands where the side bands are substantially lower in amplitude and carrier frequency. Additionally, it is not seen where *Kumar* teaches or suggests phase modulation of a carrier signal at less than 90 degrees. It appears that *Kumar* modulates signals in phase or in quadrature. For example, in FIG. 12, signals are modulated where I is in phase and Q is in quadrature, and the carrier signals are modulated in phase or in quadrature. However, for the embodiment of FIG. 11 and the text referenced by the Examiner, the apparatus or process to which the Examiner refers as demonstrating Applicants' claimed inventions does not appear to even suggest any modulation other than in phase or in quadrature. No anticipation can be seen from *Kumar*.

In other parts of *Kumar*, there are numerous references to modulating signals in phase or in quadrature. For example, FIG. 10 refers to quadrature amplitude modulation [14:55] and FIG. 12 refers to in phase and quadrature signals [15:4-5; 21:50-51; 21:65 - 22:1]. See also the text at [23:30-41], [25: 43-50], [28: 19-25], and [28: 57-61]. In fact, *Kumar* may appear to teach away from Applicants' inventions. For example, *Kumar* states that inner and outer side band regions have frequency-orthogonality [11: 59], and because orthogonality means phase-quadrature [6:

38-40], it appears that the *Kumar* signals are either in phase or phase quadrature, and even though there may not be a requirement for a specific phase relationship, the side bands are coherent [11:58-65]. Therefore, it is not believed that anything in *Kumar* teaches or suggests, let alone anticipates, Applicants' inventions, and it may even teach away from the inventions.

Consider now several of the claims in the present application. Claim 35 is an independent method claim reciting in part:

“providing a carrier signal;

“imposing a phase modulation of less than 90° on the carrier signal in accordance with a data signal to create a modulated signal having a carrier frequency and sidebands, the sidebands being substantially lower in amplitude than the carrier frequency; and

“providing the modulated signal to said first antenna for transmission.”

Nothing in *Kumar* teaches or suggests imposing a phase modulation of less than 90 degrees on a carrier signal in accordance with a data signal to create a modulated signal having a carrier frequency and side bands, the side bands being substantially lower in amplitude than the carrier frequency. The Examiner has failed to identify how *Kumar* anticipates claim 35. *Kumar* may even teach away from the claimed inventions.

Claims 36-39 are claims dependent directly or indirectly from independent claim 35 and are asserted as being patentable for the same reasons as were discussed above with respect to claim 35, for the additional limitations contained in the dependent claims as well as for the combinations claimed in the dependent claims. Note for example claim 37 reciting in part “wherein the first signal is used to power the receiver means.” Applicants have been unable to locate any teaching or suggestion in *Kumar* that even mentions this feature. It is unclear how *Kumar* anticipates these dependent claims.

Claim 40 is an independent apparatus claim and recites in part:

"a first antenna;

"oscillator means for providing a carrier signal; and

"mixing means for imposing a phase modulation of less than 90° on the carrier signal in accordance with a data signal to create a modulated signal, the mixing means also providing the modulated signal to the first antenna for transmission, wherein the modulated signal has a carrier frequency and sidebands, the sidebands being substantially lower in amplitude than the carrier frequency."

Nothing in *Kumar* teaches or suggests any apparatus for imposing a phase modulation of less than 90 degrees on the carrier signal in accordance with a data signal to create a modulated signal, and mixing means also providing the modulated signal to the first antenna for transmission, wherein the modulated signal has a carrier frequency and side bands, the side bands being substantially lower in amplitude than the carrier frequency. It is not seen how *Kumar* anticipates or even renders obvious claim 40.

Claims 41-47 are apparatus claims dependent directly or indirectly from independent claim 40 and are asserted as being patentable for the same reasons as were discussed above with respect to claim 40, for the additional limitations contained in the dependent claims as well as for the combinations claimed in the dependent claims. Note in particular claim 42 reciting in part "wherein the first signal is used to power the receiver means." Note claim 45 reciting in part "wherein the antenna is a tunable coil." Note claim 47 reciting in part a system for identifying luggage.

Claims 48-68 are independent and dependent claims that are patentable for reasons similar to those discussed above. *Kumar* fails to anticipate or even render obvious the claims in the present application.

Reconsideration of the application and claims in view of the foregoing amendments and remarks is respectfully requested. Early notice of allowance thereof is earnestly solicited.

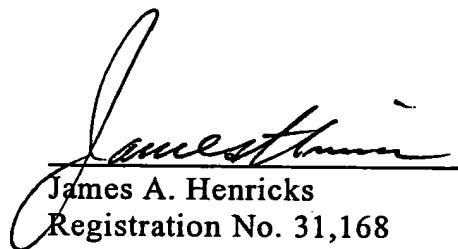
Ser. No.: 09/582,341

Atty Ref.: 010100-101

Please charge any additional fees that may be due or credit any overpayments to our deposit Account No. 50-0655. A duplicate copy of this document is enclosed.

This response is being filed with a three-month extension of time.

Respectfully submitted,

  
\_\_\_\_\_  
James A. Henricks  
Registration No. 31,168

Dated: July 18, 2001

**HENRICKS, SLAVIN & HOLMES LLP**  
840 Apollo Street, Ste. 200  
El Segundo, CA 90245-4737  
310-563-1456  
310-563-1460 (fax)  
[jhenricks@hsh-iplaw.com](mailto:jhenricks@hsh-iplaw.com) (Email)

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims

Claims 47 and 66 have been amended as follows:

47. (Amended) A system according to claim 46 ~~48~~ for identifying luggage.
66. (Amended)..A system according to claim 65 ~~67~~ configured for identifying luggage.

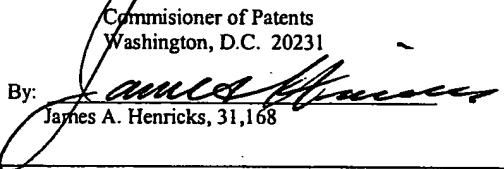
PATENT

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence and all identified attachments are being deposited on July 18, 2001 with the United States Postal Service as first class mail in an envelope with sufficient postage addressed to:

Commissioner of Patents  
Washington, D.C. 20231

By:

  
James A. Henricks, 31,168**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In Re Patent      **Graham Alexander Munro MURDOCH,**  
Application Of:    **Stuart Colin LITTLECHILD**

Examiner:      D. Pope

Serial Number:    09/582,341

Group Art Unit:    2632

Filed:            August 22, 2000

Title:             **TRANSMITTER AND A METHOD FOR  
TRANSMITTING DATA**

Commissioner of Patents  
Washington, D.C. 20231

**PETITION FOR EXTENSION OF TIME TO RESPOND****PURSUANT TO 37 C.F.R. § 1.136**

Sir:

Applicant hereby petitions the Commissioner of Patents and Trademarks for a three-month extension of time to respond to the Office Action dated January 18, 2001.

The new due date will be: July 18, 2001.

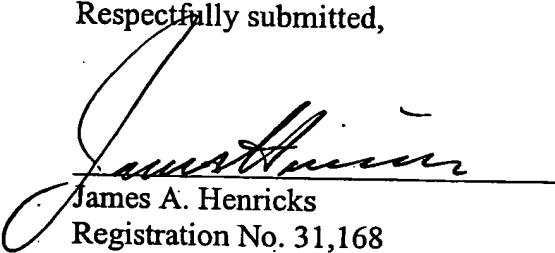
Applicant is a small entity; accordingly submitted herewith is our check:

Check No. : 2484  
Amount    : \$445.00.

This Petition is being filed simultaneously with a Response to Office Action dated January 18, 2001 and Amendment Transmittal.

Please charge any additional fee that may be due or credit any overpayment to our deposit Account No. 50-0655. A duplicate copy of this Petition is enclosed.

Respectfully submitted,

  
\_\_\_\_\_  
James A. Henricks  
Registration No. 31,168

Dated: July 18, 2001

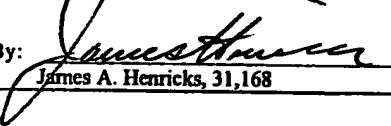
**HENRICKS, SLAVIN & HOLMES LLP**  
840 Apollo Street, Suite 200  
El Segundo, CA 90245-4737  
310-563-1456  
310-563-1460 (fax)  
[jhenricks@hsh-iplaw.com](mailto:jhenricks@hsh-iplaw.com) (Email)

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence and all identified attachments are being deposited on June 23, 2000 with the United States Postal Service as Express Mail in an envelope with sufficient postage addressed to:

Box PCT  
Assistant Commissioner For Patents  
Washington, D.C. 20231

By:

  
James A. Henricks, 31,168

EL388855022US

**COPY**

**TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371**

In Re Patent      **Murdoch et al.**  
Application Of:

Examiner:      N/A

Serial Number:      Corresponds to PCT/AU98/01077

Group Art Unit:      N/A

Filed:      June 23, 2000

Title:      **A TRANSMITTER AND A METHOD FOR  
TRANSMITTING DATA**

Box PCT  
Assistant Commissioner For Patents  
Washington, D.C. 20231

**INFORMATION DISCLOSURE STATEMENT**

Sir:

Applicant submits herewith copies of patents, publications or other information of which they are aware, as listed on Form PTO-1449, that may be material to the examination of this Application, and in respect of which, there may be a duty to disclose. This information is from the Report of the International Preliminary Search Authority, a copy of which is enclosed.

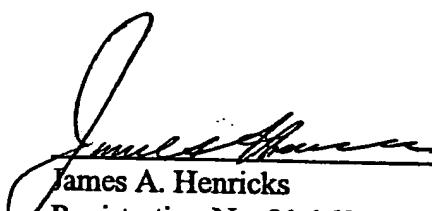
The filing of this Information Disclosure Statement shall not be construed as a representation that a search has been made (37 C.F.R. 1.97(g)), an admission that the information cited is, or is considered to be, material to patentability, or that no other material information exists.

The filing of this Information Disclosure Statement shall not be construed as an admission against interest in any manner.

It is respectfully requested that the Examiner consider these references and make their consideration of record with the initial action.

The Commissioner is hereby authorized to charge any additional fees that may be required, or credit any overpayment, relating to this communication to Account No. 50-0655. A duplicate of this sheet is enclosed.

Respectfully submitted,



\_\_\_\_\_  
James A. Henricks  
Registration No. 31,168

Dated: June 23, 2000

**HENRICKS, SLAVIN & HOLMES LLP**  
840 Apollo Street, Ste. 200  
El Segundo, CA 90245-4737  
310-563-1456  
310-563-1460 (fax)  
[jhenricks@hsh-iplaw.com](mailto:jhenricks@hsh-iplaw.com) (Email)

Enclosures

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU 98/01077

## A. CLASSIFICATION OF SUBJECT MATTER

Int Cl<sup>6</sup>: H04B 1/59, H04L 27/20

**COPY**

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC: H04B, H04L, H03C, G01S

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPAT

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5481262 A (URBAS et al.) 2 January 1996 Column 3 line 20 - column 4 line 9	1-4, 6-9
X	US 4899158 A (SAEKI et al.) 6 February 1990 Column 2 line 58 - column 4 line 49	1, 2, 6, 7
P,X	EP 851639 A (LUCENT TECHNOLOGIES INC.) 1 July 1998 Column 3 line 9 - column 9 line 12	1-4, 6-9

Further documents are listed in the continuation of Box C

See patent family annex

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

20 January 1999

Date of mailing of the international search report

- 1 FEB 1999

Name and mailing address of the ISA/AU  
AUSTRALIAN PATENT OFFICE  
PO BOX 200  
WODEN ACT 2606  
AUSTRALIA  
Facsimile No.: (02) 6285 3929

Authorized officer

J. LAW

Telephone No.: (02) 6283 2179

**INT'L INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

PCT/AU 98/01077

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report				Patent Family Member			
US 5481262	AU 81546/91	AU 55012/94	AU 55013/94				
	CA 2048385	CH 682782	DE 4125746				
	DE 4143561	FR 2667206	GB 2249001				
	GB 2258588	GB 2258589	IT 1258003				
	JP 2709758	JP 2747985	JP 2747986				
	NZ 239190	NZ 248087	NZ 2488088				
	US 5481262	US 5422636					
US 4899158	DE 3832409	FR 2621134	GB 2210538				
	JP 1084175	KR 9204754	JP 2655660				
	JP 2603672						
EP 851639	JP 10209914						
GB 2314999	GB 9713696						

END OF ANNEX

**PATENT**

Client Name & Docket No. BALDWIN SHELSTON WATERS 010100-101  
Title: TRANSMITTER AND A METHOD FOR TRANSMITTING DATA  
Applicant: Murdock et al.  
Ser.# / Pat.# 09/582,341 Filing Date: August 22, 2000

Please Acknowledge receipt of:

Application having \_\_\_\_\_ pages of specification and claims, and \_\_\_\_\_ sheets of drawings, FIG(S) \_\_\_\_\_

Declaration / Oath       Power of Attorney       Small Entity Statement       Check # \_\_\_\_\_

Patent Assignment Cover Sheet       Assignment       Check # \_\_\_\_\_

Letter       Information Disclosure Statement       Form PTO-1449 & Refer.

Certification       Petition       Check # \_\_\_\_\_

Preliminary Amendment       Request for Priority and Pri. Doc.

Reply to Office Action       Check # \_\_\_\_\_

Request for Ext. of Time       Check # 2484-#445

Amendment After Final Rejection       Check # \_\_\_\_\_

Corrected Drawings \_\_\_\_\_ sheets, FIG(S) \_\_\_\_\_

Issue Fee Transmittal       Check # \_\_\_\_\_

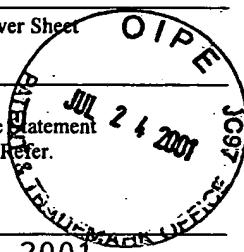
Other Amendment Trans.       Check # \_\_\_\_\_

Maintenance Fee Transmittal Form       Check # \_\_\_\_\_

Cert. of Mailing       Check # \_\_\_\_\_

Mailed July 18, 2001

By Gloria Brass



# Transmission Report

Date/Time  
 Local ID  
 Local Name  
 Company Logo

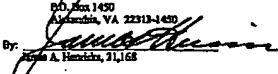
9-30-03; 10:35AM  
 13105631460  
 HENRICKSSLAVINHOLMES

This document was confirmed.  
 (reduced sample and details below)  
 Document Size A4S

Serial Number: 09/582,341

Atty. Ref. No.: 010100-101

## PATENT

CERTIFICATE OF MAILING	
I hereby certify that the correspondence and all identified attachments are being sent by fax on September 29, 2003 to (703) 308-6743 to:	
Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	
By:  Anna A. Henricle, 31/168	

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Patent Application Of	Graham Alexander Munro MURDOCH, Stuart Colin LITTLECHILD	Examiner:	D. Pope
Serial Number:	09/582,341		
Filed:	August 22, 2000	Group Art Unit:	2632
Title:	TRANSMITTER AND A METHOD FOR TRANSMITTING DATA		

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

## REQUEST FOR RECONSIDERATION OF HOLDING OF ABANDONMENT

Sir:

Applicant hereby requests reconsideration of the finding of abandonment for failure to respond to the Office Action dated January 18, 2001. Applicant's response entitled Response to Office Action Dated January 18, 2001, was filed July 24, 2001, along with a Petition for a three month extension of time. A copy of the response and extension of time are attached hereto, along with a copy of the stamped return post card showing the filing on that date.

-1-

Total Pages Scanned : 17 Total Pages Confirmed : 17

No.	Doc	Remote Station	Start Time	Duration	Pages	Mode	Comments	Results
1	402	17037465583	9-30-03; 10:29AM	6' 16"	17/ 17	EC		CP 14. 4

### Notes :

EC: Error Correct	RE: Resend	PD: Polled by Remote	MB: Receive to Mailbox
BC: Broadcast Send	MP: Multi-Poll	PG: Polling a Remote	PI: Power Interruption
CP: Completed	RM: Receive to Memory	DR: Document Removed	TM: Terminated by user
HS: Host Scan	HP: Host Print	FO: Forced Output	WT: Waiting Transfer
HF: Host Fax	HR: Host Receive	FM: Forward Mailbox Doc.	WS: Waiting Send